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PERI Indexes Name Top U.S. Climate, Air, and Water Polluters

AMHERST, Mass. – Researchers at the University of Massachusetts Amherst Political Economy Research Institute (PERI) today published new Greenhouse 100 Polluters, Suppliers, and Coal Indexes and Toxic 100 Air and Water Polluters Indexes. All the indexes report 2022 data, the latest available across these databases.

The PERI Indexes track corporate environmental performance and corporate environmental-justice performance for U.S.-based industrial activity using uniform, mandated, and comparable data from the U.S. Environmental Protection Agency (EPA). The PERI analysis of corporate performance builds on U.S. EPA facility-level data collection and expands the focus to decision-making entities.

“The Toxic 100 and Greenhouse 100 Indexes inform consumers, shareholders, regulators, lawmakers, and communities about corporate releases of toxic and climate-altering pollutants into our environment,” said Professor Michael Ash, co-director of PERI's Corporate Toxics Information Project. “People have a right to know about their exposure to toxic hazards. Legislators need to understand the effects of pollution on their constituents.”

A free, open-access online search tool provides information on every company, not only the top 100, reporting to the U.S. EPA Toxics Release Inventory, the U.S. EPA Greenhouse Gas Reporting Program, or the Energy Information Administration-7A Coal Mine Survey. Archives of earlier editions are available.

The Greenhouse 100 Indexes rank companies by their U.S.-sourced contributions to global climate change according to the U.S. EPA Greenhouse Gas Reporting Program (GHGRP) with additional information from the Energy Information Administration Mine Survey. The Greenhouse 100 Suppliers ranks companies by their supply of products that result in GHG emissions when released, combusted, or oxidized. The top four companies are petroleum refiners: Marathon Petroleum, ExxonMobil, Valero Energy, and Phillips 66. Marathon Petroleum, ExxonMobil, and Phillips 66 also extract natural gas. The top four each produced fossil fuels that resulted in at least 240 million metric tons of CO₂-equivalent emissions. Fifth-ranked Peabody Energy and sixth-ranked Arch Resources are on the list because of coal mining. Rounding out the top 10 are Chevron, Enterprise Products Partners, PBF Energy, and PDVSA.

The Greenhouse 100 Polluters ranks companies by direct emissions of greenhouse gases from facilities. The top three companies are Vistra Energy, Southern Company, and Duke Energy, continuing a five-year period in which these have been the top three. Each released more than 75 million metric tons of CO₂-equivalent emissions. Together these three companies released 4 percent of all U.S. greenhouse gas emissions from all sources including non-energy sources. The rest of the top 10 in the Greenhouse 100 are Berkshire Hathaway, American Electric Power, Energy Capital Partners, ExxonMobil, Xcel Energy, and NextEra Energy, with the U.S. government ranked 7th. The top company whose direct emissions are not dominated

by electric power plants is Exxon Mobil at rank 8. Among the top 10, Energy Capital Partners has the highest weighted share of minorities living within 10 miles of its facilities.

The Toxic 100 Air Polluters and Toxic 100 Water Polluters rank U.S. industrial polluters by their potential chronic human health risk using the U.S. EPA Toxics Release Inventory and Risk Screening Environmental Indicators. The PERI Indexes include Environmental Justice indicators to assess unequal impacts on low-income people and minorities.

The Toxic 100 Air Polluters reports that the top 10 companies in terms of US EPA's estimate of the 2022 total potential chronic human health risk from toxic chemical air pollutants are Standard Industries Inc., Greenbrier Companies, Huntsman Corp., Kaiser Aluminum, Tesla Inc., Garmin, Carpenter Technology, Becton Dickinson, Edwards Lifesciences, LyondellBasell Industries. For nine of the companies in the top 10, one or two chemicals at a single facility account for the vast majority of company human health risk, indicating large potential improvements from a focus on reducing pollution from those facilities. EPA assesses not just how many pounds of pollutants are released, but which are the most toxic and who is exposed. The index includes environmental justice indicators: for example, while minorities make up just under 40 percent of the U.S. population, they bear 74 percent of the air-toxics risk from facilities owned by Standard Industries.

The Toxic 100 Water Polluters ranks the pounds of toxics released into surface water or sent to water-treatment systems, adjusted for chemical toxicity, based on EPA data. The top 5 companies listed on the Toxic 100 Water Polluters Index for 2022 are Dow Inc., Huntsman Corp., Xylem, Celanese, and ExxonMobil. Although Dow Inc. is linked to 16 facilities in the water pollution database, the vast majority of the company's total water hazard weighted by the toxicity of each chemical is from 1,2,3-Trichloropropane at its Freeport, TX facility. The Toxic 100 Water includes Environmental Justice indicators: for example, minorities bear 66% of the toxic hazard from water releases and transfers to water treatment facilities by Dow Inc.

The Indexes cover publicly-traded as well as privately-held companies, such as Koch Industries (ranked 45th among the Toxic 100 Air Polluters, 17th among the Toxic 100 Water Polluters, 23rd among the Greenhouse 100 Polluters, and 11th among the Greenhouse 100 Suppliers) that appear on Forbes, Fortune, or S&P company lists.

“In making this information available, we are building on the historic achievements of the right-to-know movement,” explains Professor Michael Ash, co-director of PERI’s Corporate Toxics Information Project. “Our goal is to engender public participation in environmental decision-making, and to help residents translate the right to know into the right to clean air, clean water and a livable planet.”

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